# STATE OF MARYLAND Maryland Energy Administration

## **CATEGORY III SMALL PROCUREMENT (Equal to or Under \$25,000)**

# Offshore Wind Operations & Maintenance Center of Excellence Port Infrastructure Assessment

#### PART I – PURPOSE AND BACKGROUND

#### A. Purpose

The Maryland Energy Administration (MEA) is an agency of the State of Maryland. MEA is authorized by State law to maximize energy efficiency, increase the use of renewable and clean energy sources, and improve the environment. MEA is also engaged in the broader issues of sustainability, climate change and alternative transportation fuels and technologies.

The purpose of this RFP is to benefit from the examination of existing ports that currently provide operations and maintenance (O&M) services for offshore wind energy projects by assessing the infrastructures in place and the lessons learned from their implementation. Assessment results will be used to develop criteria required for a Maryland based O&M Center.

The criteria will subsequently be used to assess and rank potential sites along Maryland's Atlantic coast such as in Ocean City and its surrounding area, in order to determine the optimal offshore wind O&M Center location for the state of Maryland. Further, potential sites will be compared to the ideal criteria for specific quantitative (cost) and qualitative (suitability) comparisons. Within the cost assessments, it is important to include the costs for upgrades and improvements or any new construction.

The Maryland based O&M Center is expected to serve Maryland's initial 200 megawatt (MW) or greater offshore wind energy project after deployment and throughout its entire life cycle. A contract resulting from this procurement should also evaluate the harbor infrastructure needed for personnel and tooling activities that developers and turbine suppliers may require during the initial construction & deployment phase of the OSW facility.

However, the main goal of this RFP is to assess prospective candidate harbors for the O&M activities that will most likely be undertaken by the developer and the turbine supplier in years 1-5, as well as the operator and Independent Service Providers (ISPs) in years 6 - 25, of both Maryland's offshore wind project(s), and additional OSW projects in the mid-Atlantic region. The awarded contractor should consider both 'port-based'

strategies (using smaller crew transfer vessels) and potential future 'offshore-based' strategies using larger support vessels.

Contractor shall provide Maryland with a comprehensive evaluation of any significant infrastructure changes or necessary upgrades, including a report of general anticipated investment requirements, expected time scale for facility construction or modification, and possible expected business cluster opportunities. Ultimately, results of this evaluation will support Maryland's offshore wind planning processes and support policymakers as they implement port and harbor infrastructure policy, invest in economic, training and skills development for offshore wind employment opportunities, and plan for technology driven supply chain development.

Once the Contractor has completed the infrastructure investment assessment of Maryland's future O&M facility, the Contractor shall provide recommendations based on two scenarios that support growth in project size. The two scenarios are an addition to an adjoining piece of land or relocation of the entire operation to an alternative larger location.

## B. Background

As Maryland prepares for the deployment of offshore wind energy projects in the Maryland Wind Energy Area (WEA) east of Ocean City in the Atlantic Ocean, MEA is working in partnership with other State agencies to understand the infrastructure environment of harbors in proximity to the Maryland WEA, and engage in the necessary planning activities to enable the establishment of an 'Offshore Wind Operations & Maintenance Center of Excellence (O&M Center)'.

In the near term, the O&M Center will need to be able to provide O&M services to an offshore wind project supported by the Maryland Offshore Wind Energy Act of 2013 (MOWEA). Current estimates of the most likely build out scenarios based on MOWEA are of an initial project between 200 and 300 MW, although larger 1<sup>st</sup> phase projects are possible. The entire Maryland WEA can likely support a total build out of 1,000 MW. Moreover, the O&M Center may be called upon to support O&M for projects in other mid-Atlantic offshore wind projects, and ultimately, Maryland may work with the U.S. Dept. of Interior to establish additional WEA's in the mid-Atlantic.

Because of a growing understanding that O&M services can represent over 28% of life-cycle project costs, the offshore wind industry is increasingly focusing on the optimization of O&M efforts. By pursuing early O&M assessment and adhering to developing best practices within the industry, Maryland hopes to reduce O&M costs and thereby reduce the ultimate ratepayer impact of offshore wind energy going forward.

MEA is also mindful of the need for any O&M Center to retain the flexibility to support both original equipment manufacturers (OEMs), as they provide O&M service for the initial 5 year warranty period, as well as ISPs who will provide those services

following the primary components' end-of-warranty. Further, the O&M Center should have the capacity to support the variety of vessels and activities necessary for the inspection and replacement of cables, foundations, blades and other components throughout project life-cycle.

#### PART II – GENERAL INFORMATION

## A. Incurred Expenses

The State of Maryland will not be responsible for any costs incurred by any Contractor in preparing and submitting a quotation in response to this solicitation.

## **B.** Contractor Responsibilities

The State of Maryland will enter into a contractual agreement with the selected Contractor only. The selected Contractor shall be responsible for all products and services required by this solicitation.

#### C. General Contract Conditions

Any contract resulting from this solicitation shall include at a minimum the following contractual terms and conditions. (See generally, Code of Maryland Regulations (COMAR) 21.05.07.06 (F) and (G)).

- 1. Parties to the Contract (including taxpayer identification numbers)
- 2. Scope of the Contract
- 3. Length of the Contract
- 4. Compensation and Method of Payment
- 5. Contract Modification Clause
- 6. Disputes Clause
- 7. Maryland Law Prevails Clause
- 8. Compliance with Maryland State Finance and Procurement Law Clause
- 9. Nondiscrimination in Employment Clause
- 10. Termination for Default Clause
- 11. Termination for Convenience Clause
- 12. Delays and Extension of Time Clause
- 13. Changes Clause
- 14. Anti-Bribery Clause
- 15. Identification of Procurement Officers

## D. Compensation

The Contractor shall submit an invoice for the total hours worked for the period stated in the invoice for all activities performed as outlined in Part III Scope of Work below. A proper original invoice shall be submitted to the Procurement

Officer identified below. Included with the invoice shall be a document detailing description of actual work performed and the hours associated with the work. The Contractor shall sign a statement on the detail that certifies the information is true and correct. Payments to the Contractor pursuant to any resulting contract shall be made no later than thirty (30) days after the State's receipt of a proper original invoice from the Contractor. Each invoice must reflect the Contractor's Federal Tax Identification Number, or Social Security Number.

#### E. Protest

The State of Maryland provides avenues for any vendor to protest against the award or the proposed award of a contract. All protests should be filed in accordance with COMAR Title 21, State Procurement Regulations, Subtitle 10, Administrative and Civil Remedies.

## F. Minority Business Enterprise Notice

Minority business enterprises are encouraged to respond to this published solicitation and to obtain certification. Questions relevant to certification should be directed to the Maryland Office of Minority Business Affairs at (410) 767-8232.

# A Minority Business Enterprise Subcontracting Goal has not been established for this published solicitation.

# G. Compliance with Law/Arrearages

By submitting an offer in response to this solicitation, the Contractor, if selected for award, agrees that it will comply with all federal, state, and local laws, rules, regulations and ordinances applicable to its activities and obligations under the contract. By submitting an offer in response to this solicitation, the Contractor represents and warrants that it is not in arrears with respect to the payment of monies due and owing the State of Maryland, or any department or unit thereof, including but not limited to, the payment of taxes and employee benefits, and if selected for award, that it shall not become so in arrears during the term of the contract.

#### H. Insurance

1. The Contractor shall maintain an adequate amount of general liability insurance coverage and provide evidence of such coverage to the Administration upon request.

## I. Acknowledgment of Amendments

Although no amendments to this solicitation are anticipated, this solicitation requires the acknowledgment of the receipt of all amendments, addenda, and changes issues.

#### PART III - SCOPE OF WORK

To fulfill the purpose set out in this RFP the following specific tasks and deliverables are required:

#### A. Tasks

### Task 1: Establish Criteria

Identify, list and qualify the optimal infrastructure parameters to create a state-of-the-art O&M Center that can provide the most comprehensive set of O&M services to Maryland's first and subsequent offshore wind energy generating facilities. The services must be provided in a way that minimizes costs and maximize revenues throughout the operating life of an offshore wind facility. These infrastructure parameters should be based on present European port designs for O&M and other factors such as trends or expected changes in offshore wind technologies. Specifically, the basis of the criteria should include a description of the functions that a Maryland Atlantic Ocean based port can expect to fulfill during project development, installation, O&M and ultimately, project decommissioning.

The criteria should be assessed with respect to the support needs of:

- 1. A project developer;
- 2. A turbine supplier;
- 3. An offshore wind facility owner; and
- 4. An emerging ISP

Contractor shall consider the functions that the O&M Center will be required to support, by the above listed stakeholders in the context of:

- 1. An initial 200-300 MW offshore wind project;
- 2. Expansion of an existing facility (up to 1,000 MW) within the presently designated WEA;
- 3. Provision of services in the future to areas off other mid-Atlantic state coasts; and
- 4. The development of up to 1,000 MW of offshore wind energy, sited in a future Maryland WEA in the general region of the current WEA.

Within this task, it will be important to build on criteria such as:

1. Optimal facility size

- 2. Physical characteristics, including:
  - i) Water access and dredging
  - ii) Quayside (length, load bearing capacity, and pontoons)
  - iii) Water depth (alongside, and in the approach channel)
- 3. Land access
- 4. Buildings (including warehousing, secure storage for spare parts and critical component supply, repair workshop, offices for operational control, management and training)
- 5. Areas for support services such as car parking and road access
- 6. Helipads (on site or in proximity) noting access and noise parameters
- 7. Facilities such as power supply, vessel fueling, waste disposal
- 8. Crane and lifting capabilities
- 9. Communications with vessels and operators
- 10. IT capabilities such as computer, data storage and internet access
- 11. Surrounding business support / suppliers
- 12. Types of services or businesses brought in such as electricians, welders, painters
- 13. Skills and qualified personnel
- 2. Circumstances that have potential for cautionary concern where O & M may have a negative impact on neighboring citizens such as increased neighborhood traffic or increased water traffic that is perceived to conflict with recreational fishing.

# This task also requires:

- The identification of potential businesses and cluster participants local to the proposed O&M Center who can provide a supportive role.
- A brief description of any European O&M facilities that may have increased the size of their operational area or changed location, as well as the primary causes and motivations for such modification(s).

The above identified criteria are to be ranked in importance with explanations, for use in Task 2 below.

## Task 2 - Analyze Potential Maryland Sites

Identify suitable O&M site(s) along Maryland's Atlantic coast and, if more than one suitable site is identified, use the ranked criteria from Task 1 to develop a short list of possible locations within Maryland. The initial Maryland O&M site selection should be made with consideration to:

- 1. Port-side infrastructure requirements
- 2. Investment levels required for OSW construction support and O&M functions
- 3. Non-port infrastructure requirements for an O&M base

- 4. Local workforce (including likely staffing numbers and skill requirements)
- 5. Access to auxiliary services
- 6. Local amenities
- 7. Transportation links

## **Task 3 - Comparative Evaluations**

Provide a comparative evaluation using the criteria from Task 1 and the possible site(s) around Ocean City and their existing infrastructure from Task 2, with respect to:

- 1. Any acquisitions, changes, upgrades and modifications required to bring the potential Maryland site(s) to align with the criteria identified in task 1, including:
  - a. Infrastructure and other assets:
  - b. Planning and permitting requirements for timely delivery;
  - c. Impact on other port users such as recreational fishing;
  - d. Barriers to development such as dredging;
  - e. Impact on local residents; and
  - f. Required levels of investment along with likely timetable
- 2. Suitability of existing infrastructure with future needs to participate and lead in this emerging industry
- 3. Evaluation of the marine and land-side infrastructure and the relative merits of proposed site(s) for different O&M strategies.
- 4. How the site(s) meet requirements for installation and construction support, as well as 20+ years of O&M.

## Task 4 - Comparative Non-Maryland Site Evaluation

Identify, list and assess any out-of-state sites that may represent a competitive alternative to a future coastal Maryland O&M facility:

- 1.Identify non-Maryland potential O&M ports in which O&M activities may compete with a Maryland O&M Center, providing overview of such ports' infrastructure and capacity to provide O&M services, during both construction and operating project life.
- 2.Provide a cost modeling exercise (using existing, industry-tested models) for up to two potential competitor ports to Maryland's O&M Center and summarize the relative cost competitiveness of the Maryland-based sites.

# Task 5 - Blueprint for Advancing a Maryland OSW O&M Center of Excellence

Contractor shall define the necessary steps and timetable for the establishment of a Maryland O&M Center that will meet the following needs:

- (i) Provide local support for project developers during initial construction phase;
- (ii) Serve as maintenance hub for turbine and blade OEMs within the warranty period(s); and
- (iii) Continue to serve as the O&M base for 20+ year life of projects in Maryland's WEA and beyond.

Within this context, Contractor shall identify the necessary preparatory steps such as: raising investments; obtaining permits; licenses, workforce training and skills development; special procurement (cranes or service vessels) and physical provision of infrastructure construction or upgrades to create Maryland's Mid-Atlantic Offshore Wind O&M Center of Excellence.

Contractor shall identify steps in sequence, with anticipated time intervals and influencing factors, to create a comprehensive timetable from the present until deployment in 2018.

## Task 6 – Development of Summary Presentation

Contractor shall prepare a succinct final report that includes an executive summary of results of Tasks 1 through 5.

Contractor shall prepare a brief PowerPoint presentation highlighting the major findings from Tasks 1 through 5.

#### **B.** Deliverables

The Contractor shall provide the deliverables as defined below as the tasks are completed.

## **Task 1 Deliverables**

The deliverables for Task 1 include:

- 1. Criteria for optimal O&M facilities ranked in order of importance, based on best practices and design of European O & M facilities
- 2. A sub-grouping of the ranked criteria that would be of importance to:
- a. A developer;
- b. OEMs of primary components such as turbines, blades, foundations and cables;

- c. An OSW facility owner / asset investor; and
- d. Independent Service Providers for specific maintenance contracts
- 1. A brief explanation for the ranking when consideration is given to providing support during:
- a. the initial construction;
- b. a 20+ year O & M service to the imminent 200-300 MW OSW facility;
- c. additional offshore wind energy facilities off the coasts of Delaware, Virginia, and possibly New Jersey; and
- d. additional OSW facilities within 50 miles of Maryland's coast.
- 2. Description of any European O&M sites that may have increased their footprint area or changed location along with the prime drivers, motivations and considerations
- 3. Commentary on any anticipated changes based on technology advances
- 4. A list of functions to be performed and the support businesses that are most likely to use the O&M site
- 5. Identified skills required by the surrounding businesses and by the O&M Center

#### Task 2 Deliverables

From the ranked criteria identified in the first task, Contractor shall provide a list of possible locations within Maryland's Atlantic coastal region that have the potential to become the state's O&M Center of Excellence. The short-list of potential locations should be accompanied by succinct commentary of the rationale in their selection and their relation to the ranked criteria.

For each potential site, Contractor shall provide a description of considerations. The considerations should cover topics such as barriers, limitations, and level of investments required to build and staff Maryland's O&M facility.

Contractor shall provide relevant observations about Maryland's O&M strategy as it relates to the short-list of sites, addressing site selection and future O&M planning. Specifically, Contractor shall identify Maryland coastal areas in which conditions favor establishment of an initial O&M facility, as well as supporting future growth through subsequent expansion.

### Task 3 Deliverables

Provide qualitative and quantitative observations on the suitability of the preferred potential Maryland O&M site(s) described in the Task 2 Deliverables, and any

modifications, upgrades, infrastructure design and/or construction that may be required to meet the criteria as identified in Task 1. Further, the deliverables for this task should include and identified potentially lower-priority barriers such as dredging, locational issues with neighbors or local availability of skills and training.

Contractor shall report the above in 2 parts, with focus on: i) marine side and ii) land side for both a) support during the initial constructions and b) providing 20+ years of O&M service.

#### Task 4 Deliverables

Contractor shall provide a comparative evaluation of a Maryland-based O&M site and other locations outside of the state. Contractor shall provide a list of sites that may represent potentially competitive O&M areas, along with rationale for their consideration.

Contractor shall provide a quantified cost comparison and a description of how the preferred Maryland O&M site compares with out-of-state potentially competitive locations.

The results should include also a summarized list of competitive advantages and positive attributes that Maryland's potential O&M site could use in outreach or marketing efforts targeting to offshore wind developers and turbine suppliers.

# Task 5 Deliverables

Contractor shall submit to MEA:

- 1. A summary of requisite elements to establish the Maryland O&M Center, including timetable of necessary actions and associated investment levels to ensure timely O&M support of Maryland's first offshore wind energy project(s).
- 2. A brief list of any local, state, or national policy considerations that could affect the establishment of a mid-Atlantic offshore wind O&M Center.

Contractor shall make all reasonable efforts to ensure that the content of these deliverables provide sufficiently valuable information to MEA and other stakeholders involved in planning a Maryland O&M Center to support planning activities and decision making.

#### Task 6 Deliverables

Contractor shall submit to MEA a succinct final report that includes an executive summary of results of Tasks 1 through 5.

Contractor shall additionally submit to MEA a brief PowerPoint presentation highlighting the major findings from Tasks 1 through 5.

#### PART IV – PROPOSAL FORMAT

All proposals shall be prepared in a straightforward and concise manner, delineating the Contractor's capabilities to satisfy the requirements of the published solicitation and, specifically, the requirements for the tasks listed in Part III, Scope of Work. While there are no specific page limitations, please be concise. Proposals shall contain the following information:

A. <u>Letter of Transmittal</u> – A Letter of Transmittal on the Contractor's business stationery will accompany the Technical Proposal. The sole purpose of this letter is to provide a record of transmittal of the proposal in addition to the receipt of all amendments, addenda, and changes issued. The letter should be brief and signed by an individual who is authorized to commit the Contractor to the services and requirements stated within the published solicitation.

## B. <u>Technical Proposal</u>

- 1. Title Page -Contact information for the organization and all personnel who will perform the work; phone; fax, email or web addresses, and Federal ID numbers.
- 2. Demonstration that the Contractor's personnel have the relevant experience and knowledge of established offshore operations and maintenance harbor and port infrastructure projects. This can be provided in the form of resumes and project references. Further, the Contractor's personnel should demonstrate with a commitment letter that it has the capacity to perform the certain tasks listed in the Scope of Work and to complete the activities within the Scope of Work and to provide the required deliverables in a time frame not to exceed 6 weeks for the time the contract is awarded.
- C. <u>Price Proposal</u> The Contractor shall prepare and sign a price proposal. The price proposal shall be in the form of a single hourly rate which shall apply to all Contractor-assigned personnel for the duration of the contract. Financial information submitted shall be irrevocable for a period of ninety (90) days after the due date of the proposal.

#### PART V – EVALUATION CRITERIA

A review panel consisting of MEA staff will review proposals and may interview Contractors. All proposals that are in compliance with requirements and qualifications will be evaluated based on the following criteria. Technical aspects are more important than price.

- 1. Contractor's Experience
- 2. Demonstration of Qualifications
- 3. Ability to meet demands in Scope of Work

- 4. Ability to maintain Deliverable Schedule requested
- 5. Price

If, upon review of the proposals, the review panel has further questions, Contractors may be invited to make oral presentations to MEA.

# PART VI - BASIS OF AWARD

MEA may, at its sole option, enter into discussions with each responsible Contractor and ask the Contractors to submit "best and final offers" before making an award. Thereafter, the award of the contract will be made to the responsible Contractor whose proposal is determined to be most advantageous to the State.

Electronic submissions of the Technical and Price Proposals in a portable document format (PDF, must be compatible with Adobe Acrobat Reader) are due to the attention of Maria Ulrich (maria.ulrich@maryland.gov) at the Maryland Energy Administration by 2:00 p.m. May 2, 2014. A return e-mail will acknowledge receipt of the proposal.

Maria Ulrich Maryland Energy Administration 60 West Street Suite 300 Annapolis, MD 21401

Please address your questions to Maria Ulrich, (410) 260-7752.